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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,490	12/11/2003	Mark Zdebleck	PRTS-012 (PRO-1)	1638
6/1487	7590	11/09/2009		
Proteus Biomedical, Inc. Bozicevic, Field & Francis LLP 1900 University Avenue, Suite 200 East Palo Alto, CA 94303			EXAMINER NASSER, ROBERT L	
			ART UNIT 3735	PAPER NUMBER
			MAIL DATE 11/09/2009	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/734,490

Applicant(s)

ZDEBLICK ET AL.

Examiner

ROBERT L. NASSER

Art Unit

3735

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 48-50, 52, 59-61 and 63-68 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 48-50, 52, 59-61, 63-68 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/16/2009 has been entered.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 48, 49, 52, 59-61 are rejected under 35 U.S.C. 102(b) as being anticipated by Schallhorn et al 6473653. With reference to figure 14, Schallhorn has a catheter with a plurality of effectors spaced axially at the tip, each having at least one electrode and a processor, with a plurality of conductors extending through the lumen of the device. The power and ground are shared by each common effector. Claims 49 and 102 are rejected in that the term "cardiac pacing lead" is an intended use limitation and is met if the reference is capable of the use. Schallhorn's figure 14 shows a stimulation system and that is capable of cardiac pacing. Claim 52 is rejected in that Schallhorn is an implantable lead. Claims 58-61 are rejected in that electrodes are both sensors and stimulators. Hence, the claim language is met.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 48, 49, 52, 59-61, 63, and 66-68 are rejected under 35 U.S.C. 102(b) as being anticipated by Edwards et al 6163716 in view of Swanson et al 5797903. Edwards shows a device including a body including catheter 118, rod 154 and cap 74, a plurality of effectors connected to the body, where each effector includes a spline 76 having sensing and ablation electrodes thereon which are associated identifiable processor in microconnector 92 (see figure 20 and column 9, beginning at line 13). In figure 24, as discussed in column 10, lines 16-24, each effector, i.e. processor, is connected to a shared power line, as the power line in figure 24 circles the catheter and connects to each spine. Also, the power lines extend through ferrule 132. Hence, there is a common conductor that connects to the effectors via surface penetration. The splines, however, are not spaced axially along the length of a carrier. The examiner notes that Edwards has an alternative embodiment where, instead of splines, the electrodes are mounted in arrays on a balloon. In addition, Swanson teaches a mapping and ablation device, like that of Edwards where in figure 11, the electrodes are arranged in a bull's eye configuration, for some applications. Hence, it would have been obvious to modify Edwards to use such a configuration, as it is merely the substitution of one known equivalent configuration for another. In this combination, the effectors are spaced axially along the length of the balloon, which is the carrier and each ring would

have its own processor, just as each spline had its own processor. Claims 49 and 52 are rejected in that the term "cardiac pacing" is an intended use limitation and is met if the reference is capable of the use. Here, structurally, a lead is a lead and hence the lead of Edwards is a pacing lead and it can be implanted. Claims 58-61 are rejected in the effectors include an ablation actuator, i.e. it provides electric current and/or heat and also Edwards teaches that the electrodes can be sensing electrodes, which sense electrical potential. Claims 63 and 64 are rejected in that there are 3 leads emanating from the effectors, including power and data. The examiner notes that there inherently is a ground lead as well. Claims 66 and 67 are rejected in that Edwards has in figures 22 and 24, as discussed above, 2 leads 122 and 124 which are common to all the effectors. In addition, the processor is on a chip. It is the examiner's position that a microprocessor, like that of Edwards is a digital device, and, as such, it would require an a/d converter. Since Edwards has no other a/d converter, it is the examiner's position that it must be located on the chip. Alternatively, the examiner takes official notice that it is well known to include an a/d converter on a single chip processor. Hence, it would have been obvious to modify Edwards to use a single chip processor/converter, as it is merely the substitution of one known equivalent processor for another. Claim 68 is rejected in that there is an electrical circuit.

Claims 50, and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Edwards et al. Claim 50 is rejected in that there are multiple conductors extending outwardly through the body from the effector. However, there is only one lumen in the body. Applicant has not stated that having a separate lumen for each conductor solves

a stated problem or is for a particular purpose. Therefore, it is the examiner's position that the number of lumens would have been a mere matter of design choice for one skilled in the art. Claim 65 is rejected in that at least a portion of the leads are encapsulated by solder.

Applicant's arguments filed 10/16/2009 have been fully considered but they are not persuasive.

Applicant has asserted that in the Edwards/Swanson combination, there is not a shared conductor. The examiner notes that in figure 24 and in column 10, lines 16-24, Edwards clearly states that the + and - power conductors 1124 and 124 circle the ferrule 132, connecting to each spline. Hence, these conductors 122 and 124 are shared by each effector. The examiner notes that each spline is the effector, as each has its own processor.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT L. NASSER whose telephone number is (571)272-4731. The examiner can normally be reached on m-f 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor II can be reached on 571 272-4730. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Robert L. Nasser Jr/
Primary Examiner
Art Unit 3735

RLN
November 5, 2009